

Amendments to the Claims:

1. (Currently amended) An apparatus for perforating an advancing plastic film, comprising:
 - a frame;
 - a main shaft mounted in the frame so as to be rotatable through a partial revolution about a central axis of the main shaft;
 - at least one needle roller coupled to the main shaft in radially offset position therefrom such that rotation of the main shaft through a part of a said partial revolution moves the at least one needle roller through a predetermined arc of motion, the at least one needle roller being arranged to be freely rotatable about an axis of the at least one needle roller, independently of the rotation of the main shaft; and
 - an actuator coupled with the main shaft and operable to rotate the main shaft through said partial revolution so as to move the at least one needle roller through said arc of motion such that at one end of said arc of motion, the at least one needle roller is in an operative position, adjacent the advancing film, engaging and perforating the film, and at an opposite end of said arc of motion, the at least one needle roller is in an inoperative position, spaced apart from the advancing film.
2. (Original) The apparatus of Claim 1, wherein the frame comprises a pair of frame plates spaced apart, opposite one another.
3. (Original) The apparatus of Claim 2, wherein the frame further comprises a support bar connecting the frame plates.
4. (Original) The apparatus of Claim 2, wherein the main shaft extends between the frame plates.

5. (Original) The apparatus of Claim 1, wherein the at least one needle roller is coupled to the main shaft by being mounted on a secondary shaft fixedly mounted to the main shaft with a pair of arms, wherein the arms extend radially out from the axis of the main shaft.

6. (Original) The apparatus of Claim 1, wherein the at least one needle roller is comprised of a cylindrical body with a center bore and pins extending out radially from the body.

7. (Original) The apparatus of Claim 6, wherein the pins are tapered outward from the body.

8. (Original) The apparatus of Claim 1, further comprising a needle roller cover.

9. (Original) The apparatus of Claim 8, wherein the cover limits outside contact with the at least one needle roller at all points through said predetermined arc of motion.

10. (Original) The apparatus of Claim 1, further comprising at least one backup roller mounted in the frame so as to be freely rotatable about an axis of the at least one backup roller.

11. (Original) The apparatus of Claim 10, wherein the at least one backup roller is radially offset from the main shaft, positioned such that when the at least one needle roller is in the inoperative position, the at least one needle roller is spaced apart from the at least one backup roller, and when the at least one needle roller is in the operative position, the at least one needle roller is adjacent the at least one backup roller forming a nip therewith, through which nip the advancing film passes, the at least one needle roller in the operative position engaging the advancing film against the at least one backup roller and perforating the advancing film.

12. (Original) The apparatus of Claim 10, wherein the at least one backup roller further comprises grooves.

13. (Original) The apparatus of Claim 1, wherein the actuator is a rotary device.

14. (Original) The apparatus of Claim 13, wherein the rotary device is a solenoid.

15. (Original) The apparatus of Claim 1, wherein the apparatus is structured and arranged for attachment to a foam-in-bag cushion production apparatus.

16. (Original) The apparatus of Claim 1, wherein the apparatus comprises two needle rollers.

17. (Original) The apparatus of Claim 10, wherein the apparatus comprises two backup rollers.

18. (Currently amended) An apparatus for creating perforations over a defined area through a moving foam-in-bag film at any point along the length of the film, wherein the apparatus comprises:

a pair of frame plates spaced apart opposite one another;

a main shaft extending between the frame plates and mounted so as to be rotatable through a partial revolution about a central axis of the main shaft;

secondary shafts having central axes and being fixedly mounted to the main shaft in radially offset positions therefrom;

needle rollers mounted on each of the secondary shafts so as to be freely rotatable about the secondary shafts,

said needle rollers each comprising a cylindrical body with a center bore and pins extending out radially from the body;

tertiary shafts cantilevered off each frame plate and having free ends;

backup rollers mounted on each of said tertiary shafts such that the backup rollers are freely rotatable about the tertiary shafts; and

means for rotating the main shaft through said partial revolution so as to move the needle rollers in a predetermined arc of motion between operative and inoperative positions in which the needle rollers are respectively in contact and out of contact with the backup rollers, whereby a film passing between the backup rollers and the needle rollers is perforated by the needle rollers when the needle rollers are in the operative position and is not perforated when the needle rollers are in the inoperative position.

19. (Original) The apparatus of Claim 18, further comprising a support bar connecting the frame plates.

20. (Original) The apparatus of Claim 18, wherein each of the secondary shafts is mounted to the main shaft with a pair of arms, wherein the arms extend radially out from the axis of the main shaft.

21. (Original) The apparatus of Claim 20, wherein the secondary shafts are mounted to the main shaft such that the axes of the secondary shafts are always in line with one another.

22. (Original) The apparatus of Claim 20, wherein the axes of the secondary shafts are parallel to the axis of the main shaft.

23. (Original) The apparatus of Claim 18, wherein the pins are tapered outward from the body.

24. (Original) The apparatus of Claim 18, wherein the backup rollers comprise grooves in substantial alignment with the pins of the needle rollers

25. (Original) The apparatus of Claim 18, further comprising a support bar connecting the free ends of the tertiary shafts.

Appl. No.: 10/692,579
Amendment dated April 25, 2006
Reply to Office Action of January 30, 2006

26. (Original) The apparatus of Claim 18, further comprising needle roller covers.
 27. (Original) The apparatus of Claim 26, wherein the covers limit outside contact with the needle rollers while said rollers are in or out of contact with the backup rollers and at any point in between.
 28. (Original) The apparatus of Claim 18, wherein the means for rotating the main shaft comprise a rotary device.
 29. (Original) The apparatus of Claim 28, wherein the rotary device is a solenoid.
 30. (Original) The apparatus of Claim 18, wherein the apparatus is structured and arranged for attachment to a foam-in-bag cushion production apparatus.
- 31 - 60. (Canceled)